

Massachusetts Water Resources Commission
Meeting Minutes for May 21, 1998

Commission Members in Attendance:

Peter C. Webber	Commissioner, Department of Environmental Management
Mark Smith	Designee, Secretary of Environmental Affairs
Marilyn Contreas	Designee, Director, Dept. of Housing and Community Development
Richard H. Thibedeau	Designee, Department of Environmental Management
Arleen O'Donnell	Designee, Department of Environmental Protection
Gary Clayton	Public Member
Frank Veale	Public Member
Joe Pelczarski	Designee, Massachusetts Office of Coastal Zone Management
Bob Zimmerman	Public Member
Jeffrey Kapell	Public Member

Others in Attendance:

Lou Wagner	Massachusetts Audubon
Vicki Gartland	DEM, Office of Water Resources
Mike Gildesgame	DEM, Office of Water Resources
Alexandra Dawson	WSCAC
Lealdon Langley	DEP, Bureau of Resource Protection
Dave Terry	DEP, Bureau of Resource Protection
Alan Slater	DEP
Russ Cohen	DFWELE, Riverways Program
Nina Danforth	DEM
Ian Cooke	NepRWA
Chan Vu	MDPH
John Lynch	Pepperell Water
Mark Owen	Earth Tech
Michele Drury	DEM
Duane LeVangie	DEM, Water Management Act
Nick Barletta	Rockport Selectman
Al Boulter	Rockport ad hoc Water Committee
Rhonda Pogodzienski	Metcalf & Eddy
Hank Langstroth	Metcalf & Eddy
Rick Tomczyk	EOEA Watershed team leader, Ispwich River
John Bassett	
Mark Clark	North Reading DPW
David Hanlon	North Reading DPW
Brad Jones	state Rep. North Reading
Bob Goober	Weston & Sampson Engineers

Agenda Item #1: Executive Director's Report:

Smith noted that a revised agenda was sent out. He provided updates on the following topics:

- Public comment on the MEPA regulations revisions closes tomorrow and he encouraged those who can, to provide comments.
- The Army Corps of Engineers is offering planning assistance to states through the section 22 and Flood Plain Management Services programs, as noticed in the MEPA monitor. Each watershed team leader will receive a copy of the notice.
- The second water supply conference was hosted by Earth Tech in Shrewsbury; it was not as well attended as the one on the Cape.
- The Energy Facilities Siting Board has formed a work group on water supply issues to make sure new facilities, like Millenium Power, are sited properly and take into consideration water supply issues. There will be an important role for the WRC as the EFSB does not set environmental policy but makes sure it is followed in siting review. The WRC may be asked to set the policy in conjunction with the Board.

Agenda Item #2: Adoption of Minutes of April 9, 1998

After a quorum was achieved, Zimmerman moved with a second by Kapell

TO APPROVE THE MEETING MINUTES OF APRIL 9, 1998.

The motion passed with six in favor and one abstention.

Agenda Item #3: Pepperell Water Needs Forecast

Drury reminded the WRC that last month staff provided an initial review of the water needs forecast for the Town. The Town is seeking a Water Management Act permit to withdraw additional water from a new well. Their registration under the Act is for 0.74 mgd, and currently they are using about 1.16 mgd. Due mostly to population growth, they are expected to need 1.3 mgd by 2015. They generally have a good water conservation and system efficiency record, but the residential per capita use is relatively high, at 111. They are taking steps to correct this, including passing a by-law allowing the town to declare a "water conservation state" which allows the town to fine offenders and mandate restrictions. The forecast presented by staff essentially holds their water use flat for about eight years, until 2005, requiring additional water needs to be met by increased efficiency in the system.

The Town representatives provided additional information on the measures they have taken to maintain system efficiency and increase conservation efforts. They noted that overall consumption during the first four months of this year is below the same period last year. The summer use numbers will provide a better idea of the success of their latest measures, depending on the levels of precipitation and general weather patterns. There was additional discussion of the town's plans and the role of the Water Management program in requiring certain measures in the permit conditions. There also was discussion of the Town's sewerage plans and questions regarding methods to

maintain wastewater within the Town and the source area of water supply. The WRC will raise these issues in a letter to the Town.

Clayton moved with a second by Zimmerman

TO APPROVE THE WATER NEEDS FORECAST FOR THE TOWN OF PEPPERELL AS PRESENTED BY STAFF: 1.17 MGD IN 2000, 1.21 MGD IN 2005, 1.26 IN 2010, 1.30 IN 2015, AND 1.35 IN 2020.

The motion passed unanimously with seven votes in favor.

Agenda Item #5: Presentation of “Water Resources of the Housatonic River Basin” report

Drury presented the draft report to the Commission. The watershed team leader received a copy and the team heard a presentation on the report. She started by reviewing the purpose of the basin plans and their role in assisting watershed teams. Plans were initiated in the 1980s to provide a comprehensive understanding of the basin hydrology and subbasin yields, inflow/outflow analysis, current and forecasted population and water use, streamflows, and a variety of uses and other issues in the basin. There also is a section on self-supplied water users, such as paper companies. The reports analyze the subbasins as well as the overall basin, and use studies developed by DEM staff with the US Geological Survey for much of the hydrology section. The subbasin yield analysis shows the impacts of withdrawals and returns on the subbasins in comparison with estimated unregulated flows. It was noted that the area is losing population and that water use is declining in significant areas of the basin; however, there still is a need to emphasize water conservation and system efficiency. Smith noted that a representative from the Department of Public Health is present due to the health issues associated with PCB contamination in the Housatonic.

Drury reviewed the information contained in the draft report, and noted that staff would be presenting the final report to the WRC for approval in the future. The draft is available for review from DEM Office of Water Resources. Gartland reviewed the hydrology and streamflow portions of the report for the Commission. She reviewed the streamflow needs and recommendations for a variety of uses. She emphasized that these minimum needs should not be considered and are not intended to be maximum levels, above which all water could be withdrawn with no negative impacts. She stressed the need to maintain natural variation in streamflows. The minimums are intended to provide guidance on flows that should be considered thresholds for a variety of potential projects that may be considered. It was suggested that these minimums should be coupled with an emphasis on communities consuming the least amount of water possible and trying to have reservoir operators release some flows.

It was suggested that the defendant in the PCB case in the Housatonic might be useful in providing assistance in understanding the streamflows in the river as they look at sediment transport. The USGS found that the greatest area of sediment transport occurs in the lower reaches of the river, although it is still unclear why this is so, given the lower elevations and slower flows. It is

speculated that agricultural activities may play a role in contributing sediments along with more erodable soils.

Agenda Item #4: Rockport Streamflow Recommendations

For the record, it is noted that Commissioner Webber left the room during the Rockport discussion.

Smith reviewed the history of setting flow levels for streams contributing to Rockport's water supply development proposals. It is expected that a vote on the streamflows will be held at the June 11th meeting of the Commission. Smith passed out additional information on the drought management plan provided to the Commission by Lealdon Langley.

Gartland asked the representatives of the Town to introduce themselves. She reviewed the process involved in developing the recommendations presented to the Commission. She noted that there is limited data on flows for the small streams under consideration. Also, there is limited data regarding water use in the Town, as they reached 100 percent metering only recently and the master meter needs calibration. The recommendations are that for the three streams of immediate concern, the aquatic base flow be used (0.50 cfsm June-October and 1.0 cfsm November-May). The town also should develop a drought management plan in coordination with DEP. The town also should monitor streamflows at all diversion points to provide more data; that the town should provide at least two full years of water use data based on 100 percent metering of all users; and that the town should develop a plan to fully implement the state's water conservation standards.

Smith noted that the Town has been working on additional water supplies for at least 15 years and the WRC should move this discussion along to enable them to begin the next steps in water supply development. O'Donnell expressed concern that prior to moving much further, the WRC should be sure that the Town is in compliance with all existing DEP enforcement issues. The Town feels they currently are in compliance with all DEP requirements. O'Donnell will check with DEP/NERO to be sure.

Clayton asked if there are specific deadlines or dates for #2 and #5 on the recommendations. He also asked for more detail on #7. Staff will provide additional details.

Langley discussed the memo regarding recommendations for drought management plan for Rockport and outlined the components of a drought management plan.

Agenda Item #6: North Reading Sewering Proposals

The Town of North Reading is seeking guidance from the Commission on how it should proceed with several options for sewerage portions of the town. Currently, the only portion of town with sewers is an industrial area in the southwestern area which currently is sewerage to the MWRA. There are some problems with compliance with Title 5 in the town. Prior to committing to either ground water discharge or additional sewerage to MWRA, the town would like an indication of which direction to go. Key questions include:

1. Can the existing MWRA discharge permit be redefined to include the whole industrial area and a portion to the north part in the discharge permit (expanding the discharge from 65,000 to

200,000 gallons per day)?

2. North Reading uses water brought into the Ipswich basin from the Merrimack via an approved interbasin transfer from Andover. Can that addition to the basin be seen as a “credit” gallon per gallon toward discharging additional waste flows out of basin?
3. Third, can there be a double pipe along the I-93 corridor in which water from the MWRA comes in to the town and the wastewater goes back to the MWRA?

The town is discussing these issues with both Wilmington and Reading. Wilmington does not have sewer infrastructure adjacent to North Reading. The town would like to sewer Concord Street to Park Street, route 28 and the general mail facility to Route 128, which would add up to about 200,000 gallons per day. The Martins Pond wastewater issue also is a problem, but that might be addressed with a ground water discharge. Drury reported that the alternatives proposed by the Town were reviewed by legal staff. She reviewed the main issues:

1. If the current connection to the MWRA was not enlarged and the MWRA will accept the expansion of the sewer areas and the increased flow, the interbasin transfer act will not apply.
2. Even though the town purchases water from the Merrimack River basin through Andover, any transfer which includes North Reading’s local sources would have to be reviewed under the Act in its entirety. The interbasin transfer act regulates total capacity to transfer water out of basin, not just the incremental amount.
3. If the Concord Street Water and Sewer District is served with potable water from the MWRA, it would have to apply for admission to the MWRA which would require interbasin transfer approval. If the amount were under one million gallons per day, the town could apply for a determination of insignificance.
4. If the water used by the sewer district is purchased directly from Andover, North Reading would need to demonstrate that no water from the Ipswich River basin sources will be used by the District, except during DEP Emergency Declarations under the Water Management Act. If the total amount of water, including water used within the sewer district, purchased by North Reading from Andover did not exceed the amount of the town’s interbasin transfer approval (1 mgd), it is likely that the Act would not apply. However, because this is a new situation, North Reading should request a Determination of Applicability under the Act so the WRC can examine the facts and outline the conditions that would determine the Acts applicability.
5. The Act would still apply even if the approved withdrawals under the Water Management Act are decreased because the Interbasin Transfer Act regulates capacity, not actual withdrawals. The WRC would have to look at the actual combined capacity of the wells, not what is approved for withdrawals under the Water Management Act.

Tomczyk reviewed the letter and recommendations he sent to the Commission on behalf of the watershed team. The recommendations include consideration of tertiary treatment and groundwater discharge; wastewater recycling, and spray irrigation. In addition, the town could mitigate losses by reducing the utilization of North Reading well fields during the time of greatest demands and

relying on other sources; developing a comprehensive water conservation and management plan; and infiltrating storm water by decreasing impervious areas and increasing infiltration. He also reported that the MWRA would be open to considering the provision of water to the town.

Smith recognized the town's efforts to look at a range of alternatives that are of concern to the WRC and its agencies, particularly with low flows on the Ipswich and interbasin transfer issues. He also thanked the Ipswich team for their effort.

The Commission will continue the discussion at a subsequent meeting, and will provide more specific guidance to the town. The town will be drafting additional steps to be taken.

Agenda Item #7: WRC Policy: Discussion of Performance Standards

Smith described the latest draft of the performance standards developed by the working group. The first item is system requirements that need to be in place in order for the application for interbasin transfer to be acceptable. The second area is the performance standards with specific values. The third section list additional measures to be implemented over time to maintain the system efficiency. These long-term measures are described in a comprehensive water management plan for the community.

He asked the commission to consider how to balance setting very strict standards for interbasin transfers which may be push some communities to consider more harmful in-basin source development rather than a potentially less harmful interbasin transfer.

This item will be placed early on the next agenda.

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Meeting minutes approved 8/13/98

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